

10/521940

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DT01 Rec'd PCT/PTC 21 JAN 2005

SEQUENCE LISTING

<110> Yamanouchi Pharmaceutical Co., Ltd.  
Harigai, Masayoshi

<120> RA relating novel gene

<130> YHA0332-PCT

<150> JP2002-211951

<151> 2002-07-22

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<170> PatentIn version 3.1

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<223> Inventor: Takeuchi, Masahiro; Yamaji, Noboru; Takasaki, Jun;  
Akamatsu, Masahiko; Tsunoyama, Kazuhisa; Harigai, Masayoshi

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Gln Asn Leu Leu Val Gln Lys Asp Pro Leu Leu Ser Gln Ala Cys Val  
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Ser Thr Pro His Ala Pro Leu Ser Ala Ser Gly Glu His Pro Ala Thr  
35 40 45  
  
ccc cga cac aca cac ccc ggc tac atc ccg cct tct cac gct tgg tca 192  
Pro Arg His Thr His Pro Gly Tyr Ile Pro Pro Ser His Ala Trp Ser  
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Pro Arg His Thr His Pro Gly Tyr Ile Pro Pro Ser His Ala Trp Ser  
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10/34

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Lys Ala Asp Thr Arg Asp Ser Arg Gln Ala Cys Leu Ala Ala Ser Leu  
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Arg Met Gly Lys Ala Ala Ala Ala Val Ala Phe Gly Ala Glu Val Gly  
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Val Arg Leu Ala Leu Phe Ala Ala Phe Leu Val Thr Glu Leu Leu Pro  
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Pro Phe Gln Arg Leu Ile Gln Pro Glu Glu Met Trp Leu Tyr Arg Asn  
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Pro Tyr Val Glu Ala Glu Tyr Phe Pro Thr Lys Pro Met Phe Val Ile  
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Ala Phe Leu Ser Pro Leu Ser Leu Ile Phe Leu Ala Lys Phe Leu Lys  
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Lys Ala Asp Thr Arg Asp Ser Arg Gln Ala Cys Leu Ala Ala Ser Leu  
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 Tyr Val Glu Ala Glu Tyr Phe Pro Thr Lys Pro Met Phe Val Ile Ala  
 50 55 60  
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50 55 60



Phe Leu Ser Pro Leu Ser Leu Ile Phe Leu Ala Lys Phe Leu Lys Lys  
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Ala Asp Thr Arg Asp Ser Arg Gln Ala Cys Leu Ala Ala Ser Leu Ala  
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 115 120 125

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Arg Lys Ser Phe Pro Ser Gly His Ser Ser Phe Ala Phe Ala Gly Leu  
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 165 170 175

Gln Gly Arg Gly Lys Ser Trp Arg Phe Cys Ala Phe Leu Ser Pro Leu  
 180 185 190

Leu Phe Ala Ala Val Ile Ala Leu Ser Arg Thr Cys Asp Tyr Lys His  
 195 200 205

His Trp Gln Asp Val Leu Val Gly Ser Met Ile Gly Met Thr Phe Ala  
 210 215 220

Tyr Val Cys Tyr Arg Gln Tyr Tyr Pro Pro Leu Thr Asp Ala Glu Cys  
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Thr Pro Leu Ala Val Ile Cys Val Val Lys Ile Ile Arg Arg Thr Asp	
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Lys Thr Glu Ile Lys Glu Ala Phe Leu Ala Val Ser Leu Ala Leu Ala	
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Arg Pro Asp Phe Phe Tyr Arg Cys Phe Pro Asp Gly Val Met Asn Ser	
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Glu Met His Cys Thr Gly Asp Pro Asp Leu Val Ser Glu Gly Arg Lys	
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Ser Phe Pro Ser Ile His Ser Ser Phe Ala Phe Ser Gly Leu Gly Phe	
165 170 175	

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Gln Ser Asp Asn Ile Pro Thr Arg Leu Met Phe Ala Ile Ser Phe Leu  
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Thr Pro Leu Ala Val Ile Cys Val Val Lys Ile Ile Arg Arg Thr Asp  
85 90 95

Lys Thr Glu Ile Lys Glu Ala Phe Leu Ala Val Ser Leu Ala Leu Ala  
100 105 110

Leu Asn Gly Val Cys Thr Asn Thr Ile Lys Leu Ile Val Gly Arg Pro  
115 120 125

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Ser Phe Pro Ser Ile His Ser Ser Phe Ala Phe Ser Gly Leu Gly Phe  
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Thr Thr Phe Tyr Leu Ala Gly Lys Leu His Cys Phe Thr Glu Ser Gly  
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Arg Gly Lys Ser Trp Arg Leu Cys Ala Ala Ile Leu Pro Leu Tyr Cys  
 195 200 205

Ala Met Met Ile Ala Leu Ser Arg Met Cys Asp Tyr Lys His His Trp  
 210 215 220

Gln Asp Ser Phe Val Gly Gly Val Ile Gly Leu Ile Phe Ala Tyr Ile  
 225 230 235 240

Cys Tyr Arg Gln His Tyr Pro Pro Leu Ala Asn Thr Ala Cys His Lys  
 245 250 255

Pro Tyr Val Ser Leu Arg Val Pro Ala Ser Leu Lys Lys Glu Glu Arg  
 260 265 270

Pro Thr Ala Asp Ser Ala Pro Ser Leu Pro Leu Glu Gly Ile Thr Glu  
 275 280 285

Gly Pro Val  
 290

<210> 11  
 <211> 816  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)..(813)  
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<400> 11  
 atg cgg gag ctg gcc att gag atc ggg gtg cga gcc ctg ctc ttc gga 48  
 Met Arg Glu Leu Ala Ile Glu Ile Gly Val Arg Ala Leu Leu Phe Gly  
 1 5 10 15

gtc ttc gtt ttt aca gag ttt ttg gat ccg ttc cag aga gtc atc cag 96  
 Val Phe Val Phe Thr Glu Phe Leu Asp Pro Phe Gln Arg Val Ile Gln  
 20 25 30

cca gaa gag atc tgg ctc tat aaa aat cct ttg gtg caa tca gat aac 144  
 Pro Glu Glu Ile Trp Leu Tyr Lys Asn Pro Leu Val Gln Ser Asp Asn  
 35 40 45

ata cct acc cgc ctc atg ttt gca att tct ttc ctc aca ccc ctg gct 192  
 Ile Pro Thr Arg Leu Met Phe Ala Ile Ser Phe Leu Thr Pro Leu Ala  
 50 55 60

gtt att tgt gtg gtg aaa att atc cgg cga aca gac aag act gaa att 240  
Val Ile Cys Val Val Lys Ile Ile Arg Arg Thr Asp Lys Thr Glu Ile  
65 70 75 80

aag gaa gcc ttc tta gcg gtg tcc ttg gct ctt gct ttg aat gga gtc 288  
Lys Glu Ala Phe Leu Ala Val Ser Leu Ala Leu Ala Leu Asn Gly Val  
85 90 95

tgc aca aac act att aaa tta ata gtg gga aga cct cgc ccc gat ttc 336  
Cys Thr Asn Thr Ile Lys Leu Ile Val Gly Arg Pro Arg Pro Asp Phe  
100 105 110

ttt tac cgc tgc ttt cca gat gga gtg atg aac tcg gaa atg cat tgc 384  
Phe Tyr Arg Cys Phe Pro Asp Gly Val Met Asn Ser Glu Met His Cys  
115 120 125

aca ggt gac ccc gat ctg gtg tcc gag ggc cgc aaa agc ttc ccc agc 432  
Thr Gly Asp Pro Asp Leu Val Ser Glu Gly Arg Lys Ser Phe Pro Ser  
130 135 140

atc cat tcc tcc ttt gcc ttt tcg ggc ctt ggc ttc acg acg ttc tac 480  
Ile His Ser Ser Phe Ala Phe Ser Gly Leu Gly Phe Thr Thr Phe Tyr  
145 150 155 160

ttg gcg ggc aag ctg cac tgc ttc acc gag agt ggg cgg gga aag agc 528  
Leu Ala Gly Lys Leu His Cys Phe Thr Glu Ser Gly Arg Gly Lys Ser  
165 170 175

tgg cgg ctc tgt gct gcc atc ctg ccc ttg tac tgc gcc atg atg att 576  
Trp Arg Leu Cys Ala Ala Ile Leu Pro Leu Tyr Cys Ala Met Met Ile  
180 185 190

gcc ctg tcc cgc atg tgc gac tac aag cat cac tgg caa gat tcc ttt 624  
Ala Leu Ser Arg Met Cys Asp Tyr Lys His His Trp Gln Asp Ser Phe  
195 200 205



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gtg ggt gga gtc atc ggc ctc att ttt gca tac att tgc tac aga cag 672  
Val Gly Gly Val Ile Gly Leu Ile Phe Ala Tyr Ile Cys Tyr Arg Gln  
210 215 220

cac tat cct cct ctg gcc aac aca gct tgc cat aaa ccc tac gtt agt 720  
His Tyr Pro Pro Leu Ala Asn Thr Ala Cys His Lys Pro Tyr Val Ser  
225 230 235 240

ctg cga gtc cca gcc tca ctg aag aaa gag gag agg ccc aca gct gac 768  
Leu Arg Val Pro Ala Ser Leu Lys Lys Glu Glu Arg Pro Thr Ala Asp  
245 250 255

agc gca ccc agc ttg cct ctg gag ggg atc acc gaa ggc ccg gta tga 816  
Ser Ala Pro Ser Leu Pro Leu Glu Gly Ile Thr Glu Gly Pro Val  
260 265 270

<210> 12

<211> 271

<212> PRT

<213> Homo sapiens

<400> 12

Met Arg Glu Leu Ala Ile Glu Ile Gly Val Arg Ala Leu Leu Phe Gly  
1 5 10 15

Val Phe Val Phe Thr Glu Phe Leu Asp Pro Phe Gln Arg Val Ile Gln  
20 25 30

Pro Glu Glu Ile Trp Leu Tyr Lys Asn Pro Leu Val Gln Ser Asp Asn  
35 40 45

Ile Pro Thr Arg Leu Met Phe Ala Ile Ser Phe Leu Thr Pro Leu Ala  
 50 55 60

Val Ile Cys Val Val Lys Ile Ile Arg Arg Thr Asp Lys Thr Glu Ile  
 65 70 75 80

Lys Glu Ala Phe Leu Ala Val Ser Leu Ala Leu Ala Leu Asn Gly Val  
 85 90 95

Cys Thr Asn Thr Ile Lys Leu Ile Val Gly Arg Pro Arg Pro Asp Phe  
 100 105 110

Phe Tyr Arg Cys Phe Pro Asp Gly Val Met Asn Ser Glu Met His Cys  
 115 120 125

Thr Gly Asp Pro Asp Leu Val Ser Glu Gly Arg Lys Ser Phe Pro Ser  
 130 135 140

Ile His Ser Ser Phe Ala Phe Ser Gly Leu Gly Phe Thr Thr Phe Tyr  
 145 150 155 160

Leu Ala Gly Lys Leu His Cys Phe Thr Glu Ser Gly Arg Gly Lys Ser  
 165 170 175

Trp Arg Leu Cys Ala Ala Ile Leu Pro Leu Tyr Cys Ala Met Met Ile  
 180 185 190

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Ala Leu Ser Arg Met Cys Asp Tyr Lys His His Trp Gln Asp Ser Phe  
195 200 205

Val Gly Gly Val Ile Gly Leu Ile Phe Ala Tyr Ile Cys Tyr Arg Gln  
210 215 220

His Tyr Pro Pro Leu Ala Asn Thr Ala Cys His Lys Pro Tyr Val Ser  
225 230 235 240

Leu Arg Val Pro Ala Ser Leu Lys Lys Glu Glu Arg Pro Thr Ala Asp  
245 250 255

Ser Ala Pro Ser Leu Pro Leu Glu Gly Ile Thr Glu Gly Pro Val  
260 265 270

<210> 13

<211> 37

<212> DNA

<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially  
synthesized primer sequence

<400> 13

cgcgcggtac cgccaccatg cagctcagga atgtgtc

37

<210> 14

<211> 31

<212> DNA

<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially  
synthesized primer sequence

<400> 14

gcgcgctcga ggtttctgat gtgggacagg g

31

<210> 15

<211> 37

<212> DNA

<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially  
synthesized primer sequence

<400> 15

gcgcgaagct tgccaccatg cctagaaggg gaccaca

37

<210> 16

<211> 30

<212> DNA

<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially  
synthesized primer sequence

<400> 16

gcgcgctcga ggtgcggcct gtcgtctgct

30

<210> 17  
<211> 35  
<212> DNA  
<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially  
synthesized primer sequence

<400> 17  
gcgcgaagct tgccaccatg ccctoggcac agccg

35

<210> 18  
<211> 35  
<212> DNA  
<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially  
synthesized primer sequence

<400> 18  
gcgcgctoga gaatatcaaa acaataagaa tcccc

35

<210> 19  
<211> 35  
<212> DNA  
<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially  
synthesized primer sequence

<400> 19

gcgcgaagct tgccaccatg gggaaggcgg cggcg

35

<210> 20

<211> 35

<212> DNA

<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially  
synthesized primer sequence

<400> 20

gcgcgaagct tgccaccatg gctgcgggag cgcgc

35

<210> 21

<211> 30

<212> DNA

<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially  
synthesized primer sequence

<400> 21

gcgcgctcga gtaccgggcc ttcggtgatc

30

<210> 22

<211> 36

<212> DNA

<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially

synthesized primer sequence

<400> 22

gcgcgaagct tgccaccatg cgggagctgg ccattg

36

<210> 23

<211> 31

<212> DNA

<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially  
synthesized primer sequence

<400> 23

tcgaggacta caaggacgac gatgacaagc t

31

<210> 24

<211> 31

<212> DNA

<213> Artificial

<220>

<223> Description of Artificial Sequence:an artificially  
synthesized primer sequence

<400> 24

ctagagcttg tcatcgctgt ccttgtagtc c

31

<210> 25

<211> 16

<212> DNA

<213> Homo sapiens

<400> 25

cacgtggcct cccagc

16

<210> 26

<211> 24

<212> DNA

<213> Homo sapiens

<400> 26

taggttctcc catttgctgt tttt

24

<210> 27

<211> 20

<212> DNA

<213> Homo sapiens

<400> 27

cccttgaaca acgcaggttc

20

<210> 28

<211> 20

<212> DNA

<213> Homo sapiens

<400> 28

tttgtaggga caccacctg

20

<210> 29

<211> 21

<212> DNA

<213> Homo sapiens



<400> 29  
cttccaaggt gcaagtgagg a 21

<210> 30  
<211> 23  
<212> DNA  
<213> Homo sapiens

<400> 30  
cattggaggc agaatacagt gtg 23

<210> 31  
<211> 20  
<212> DNA  
<213> Homo sapiens

<400> 31  
tcctgggagg atggacacta 20

<210> 32  
<211> 21  
<212> DNA  
<213> Homo sapiens

<400> 32  
tgatgtcagg gtggcagatg t 21

<210> 33  
<211> 18  
<212> DNA  
<213> Homo sapiens

<400> 33

gggaagggtga aggtcgga

18

<210> 34

<211> 17

<212> DNA

<213> Homo sapiens

<400> 34

gcagccctgg tgaccag

17